Tenda®

V1.0

User Guide

www.tenda.cn

D840R ADSL2+ Router

Copyright Statement

Tenda® the registered trademark of Shenzhen Tenda Technology Co., Ltd. Other trademark or trade name mentioned herein are the trademark or registered trademark of the company. Copyright of the whole product as integration, including its accessories and software, belongs to Shenzhen Tenda Technology Co., Ltd. Without the permission of Shenzhen Tenda Technology Co., Ltd, individual or party is not allowed to copy, plagiarize, imitate or translate it into other languages.

All the photos and product specifications mentioned in this manual are for references only, as the upgrading of software and hardware, there will be changes. And if there are changes, Tenda is not responsible for informing in advance. If you want to know more about our products information, please visit our website at www.tenda.cn

CONTENTS

Chapter 1 Overview 1

1.1 Product Introduction 1

1.2 Product Features 1

1.3 Supporting Protocol 1

1.4 Data Encapsulation 3

Chapter 2 Hardware Installation 4

2.1 ADSL Router Connection 4

2.2 USB Installation 4

Chapter 3 Before Web Management Configuration 5

3.1 Network Configuration of Your Computer 5

3.2 Verifying the Connection 8

3.3 Logging in to the Router 9

Chapter 4 Quick Installation Guide 10

4.1 Configure the PPPoE 11

4.2 Configure the PPPoA 13
4.3 Configure the MER 15
4.4 Configure the IPoA 18

Chapter 5 Configuration Description 20

5.1 Device Information 20
5.2 Advanced Settings 23
5.2.1 WAN *23*
5.2.2 LAN *49*
5.2.3 NAT *51*
5.2.4 Security *57*
5.2.5 Routing *65*
5.2.6 DNS *67*
5.2.7 DSL *72*
5.3 DHCP 73
5.4 System Tool 73
5.4.1 Settings *74*
5.4.2 System Log *76*
5.4.3 Internet Time *78*
5.4.4 Access Control *79*

5.4.5 Software Update 82
5.4.6 Save/Reboot 82

Chapter 6 Appendix 83

Appendix 1: Troubleshooting 83
Appendix 2: FAQ 85

Chapter 1 Overview

1.1 Product Introduction

D840R ADSL2+ Router complies with ADSL, ADSL2 and ADSL2+ standards. Supporting up to 24Mbps downstream rate and 1Mbps upstream rate, it supports multiple network protocols and provides NAT Router, Bridge and switch functions. Built-in 4-port switch can add more end users without purchasing hub or switch. In addition, the intelligent software, Setup Wizard, can assist you to access the Internet fast and easily. Powerful and exquisite, it is the best choice for SOHO and small enterprise users to share the Internet.

1.2 Product Features

- Provides up to 24Mbps downstream rate and 1Mbps upstream rate
- Supports DHCP, NAT, IGMP, ICMP, ARP
- Four 10/100M Auto-Negotiation RJ-45 Ethernet ports for network adapter, Hub and switch

connectivity

- One RJ-11 port and Voice Splitter included
- One USB port support for connecting PC's USB port
- Provides Web-based management and firmware upgrade
- Complies with ADSL, ADSL2 and ADSL2+ standards
- Provides NAT Router, Bridge and switch functions
- Compatible with all mainstream DSLAM (CO)
- Provides PPPOE, PPPOA, CLIP protocols
- Supports firewall and hacker attack prevention
- Supports Internet Multi Media
- Provides static and dynamic routes
- Up to 6.5km transmission distance
- Setup Wizard support for fast and easy configurations

1.3 Supporting Protocol

Supports full-rate ADSL2+ standard

- ANSI T1. 413 Issue 2
- ITU-T G. 992. 1 (G. dmt)
- ITU-T G. 992. 2 (G. Lite)

- ITU-T G. 992. 3
- ITU-T G. 992. 5

1.4 Data Encapsulation

- Supports RFC 1483 Bridge、RFC 1483 Router
- Supports Classical IP over ATM (RFC 1577)
- Supports PPP over ATM(RFC 2364)
- Supports PPP over Ethernet (RFC 2516)

Chapter 2 Hardware Installation

2.1 ADSL Router Connection

1. Connect one end of the telephone line to the LINE port of the D810R and the other end to the MODEM port of the voice splitter.
2. Connect the power adapter to the PWR port of the D810R.
3. Use an Ethernet cable to connect the LAN port with the NIC of your computer.

2.2 USB Installation

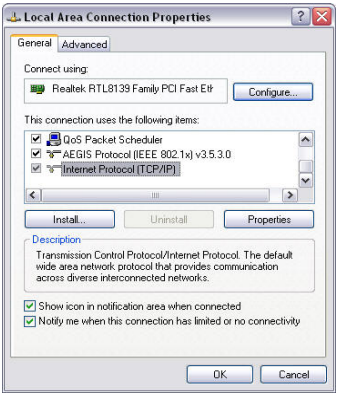
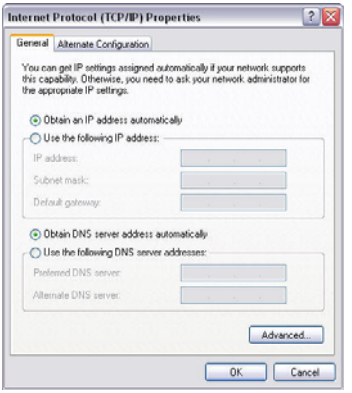
To connect the device to the USB interface of the computer, please follow the steps below:

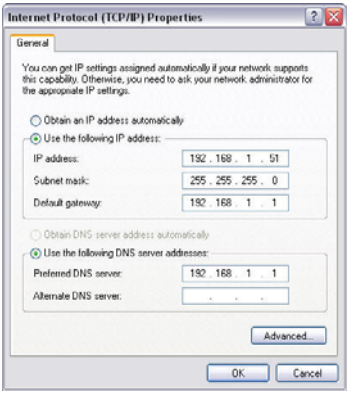
1. Connect to the USB port of the D810R through a USB cable.
2. Connect the other end of the cable to the computer's USB port.
3. Set up the USB driver provided by the CD-ROM.

Chapter 3 Before Web Management Configuration

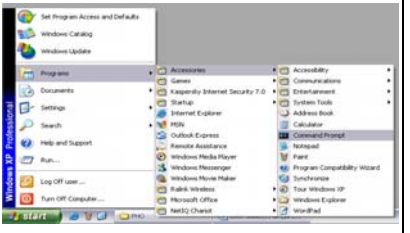
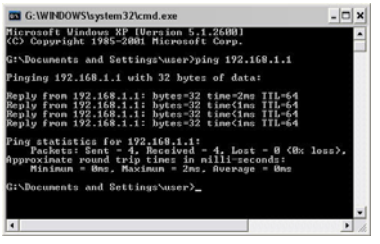
3.1 Network Configuration of Your Computer

1. On the desktop of your computer, right-click "My Network Places", and then select "Properties" in the shortcut menu.	
2. In the window that appears, right-click "Local Area Connection", and then select "Properties".	

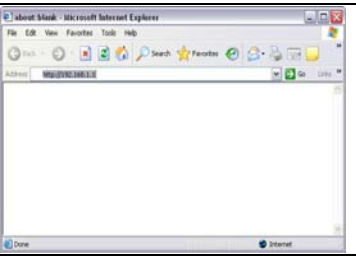
3. In the pop-up dialog box, check “Internet Protocol (TCP/IP)” and then click “Properties”.	
4. In the window that appears, select “Obtain an IP address automatically (O)” or “Use the following IP address (S)”. 1) When “Obtain an IP address automatically (O)” is selected, the window is as shown in the right figure.	

2) "Use the following IP address": IP address: 192.168.1.XXX (XXX ranges 2 ~ 254) Subnet mask: 255.255.255.0 Default gateway: 192.168.1.1 DNS server: Enter the local DNS server address (for this address, you can consult your ISP) or the router's default gateway as the DNS server. At the end of the setting, click "OK" to submit the settings. And then click "OK" in the "Local Area Connection Properties" window.	

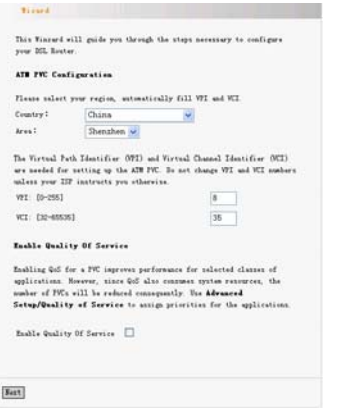
3.2 Verifying the Connection

1. Select “Start→Programs →Accessories→Command Prompt”.	
According to the format shown in the right figure, enter “Ping 192.168.1.1” and press Enter. If the system gives the result shown in the right figure, the connection between your computer and the router is OK.	

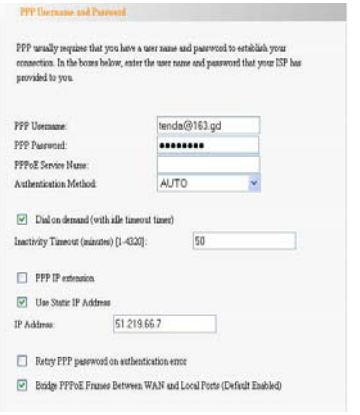
3.3 Logging in to the Router

1. Open the web browser, and enter "http://192.168.1.1" in the address field, and then press Enter.	
2. In the pop-up login window, enter the user name ("admin") and password ("admin"), and click "OK" (both user name and password are "admin" by default).	
3. If the user name and password entered are correct, the browser displays the administrator window shown right.	

Chapter 4 Quick Installation Guide

In the Wizard page, Select the required your “Country” and “Area” from the drop-down lists. If you can not find your country and city in these lists, you can consult your ISP and manually enter the VPI and VCI values of your area. After that, click “Next”.	

4.1 Configure the PPPoE

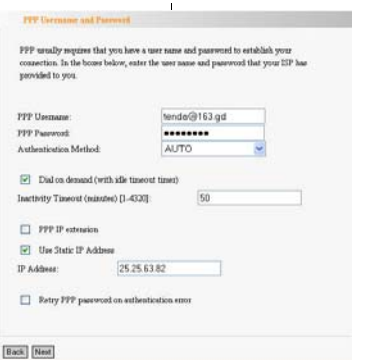
1. Select “PPP over Ethernet (PPPoE)”. Click “Next”.	
2. Enter the PPP user name and password provided by the ISP. If the ISP also provides the PPPoE service name, you can enter the corresponding value; otherwise, keep this field null. Use the default values for other options. For their more settings, refer to the detailed description in the Advanced Settings.	

PPP Username and Password
PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.
PPP Username:
tenda@163.gd
PPP Password:
PPPoE Service Name:
Authentication Method:
AUTO
Dial on demand (with idle timeout timer)
Inactivity Timeout (minutes) [1-4320]:
50
PPP IP extension
Use Static IP Address
IP Address:
Retry PPP password on authentication error
Bridge PPPoE Frames Between WAN and Local Ports (Default Enabled)

3. Click “Next” and check to enable the WAN service (enabled by default).	
4. Click “Next” to display the window shown the summary of your settings.	
5. Click “Save/Reboot” to activate your settings. The system automatically establishes connection in a few minutes.	

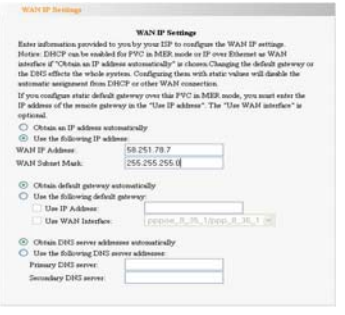
Make sure that the settings below match the settings provided by your ISP.
VPI / VCI: 0 / 35
Connection Type: PPPoE
Service Name: pppoe_0_35_1
Service Category: UBR
IP Address: Automatically Assigned
Service State: Enabled
NAT: Enabled
Firewall: Enabled
IGMP Multicast: Disabled
Quality Of Service: Disabled
Click "Save/Reboot" to save these settings and reboot router. Click "Back" to make any modifications.
NOTE: The configuration process takes about 1 minute to complete and your DSL Router will reboot.
Back
Save/Reboot

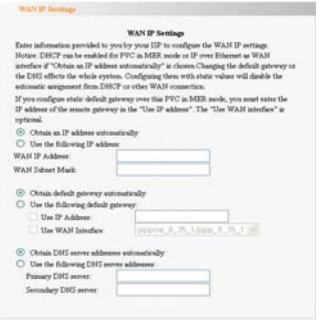
4.2 Configure the PPPoA

1. Select “PPP over ATM (PPPoA)”. Click “Next”.	
2. Enter the PPP user name and password provided by the ISP. If the ISP also provides the PPPoA service name, you can enter the corresponding value; otherwise, keep this field null. Use the default values for other options. For their more settings, refer to the detailed description in the Advanced Settings.	

3. Click “Next” and check to enable the WAN service (enabled by default).	
4. Click “Next” to display the window shown the summary of your settings.	
5. Click “Save/Reboot” to activate your settings. The system automatically establishes connection in a few minutes.	

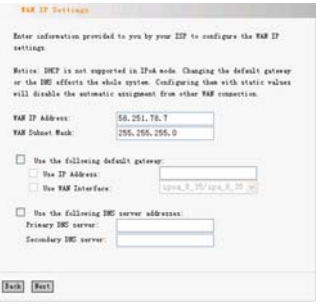
4.3 Configure the MER

1. Select “MAC Encapsulation Routing (MER)”. Click “Next”.	
2. If your ISP provides the static IP address, you should enter the corresponding values in “WAN IP Address” and “WAN Subnet Mask”.	

3. If your ISP provides the dynamic IP address, you should select “Obtain an IP address automatically”.	
4. Click “Next”. In the case of multiple computers share the Internet access service, it is recommend- ed to enable NAT and firewall.	

5. Click “Next” to display the window shown the summary of your settings.	
6. Click “Save/Reboot” to activate your settings. The system automatically establishes connection in a few minutes.	

4.4 Configure the IPoA

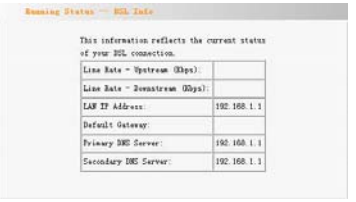
1. Select “IP over ATM (IPoA)”. Click “Next”.	
2. Enter the fixed IP address and subnet mask in corresponding fields.	
3. Click “Next”. It is recommended to enable the NAT and firewall.	

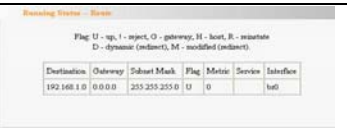
4. Click “Next” to display the window shown the summary of your settings.	
5. Click “Save/Reboot” to activate your settings. The system automatically establishes connection in a few minutes.	

Chapter 5 Configuration Description

5.1 Device Information

1) Click “Running Status” and “Summary” to display the “Device Info” and “DSL Info” window.	
2) The device information covers: a. Board ID b. Software version c. Boot version d. LAN MAC address e. WAN MAC address f. Running time g. System time	

3) The DSL information covers: a. Upstream link rate b. Downstream link rate c. LAN IP address d. Default gateway: In the pure bridge mode, there is no gateway; in other modes such as PPPoE and PPPoA, the gateway address is the IP address of the upstream device. e. Primary DNS server: In the PPPoA/PPPoE mode, the DNS address is obtained from the upstream device; in the pure bridge mode, it is not required to set the DNS address; in other modes, you can manually enter the DNS address. f. Secondary DNS server	

4) Click “WAN” in left menu to display the window shown in the right figure. From the table, you can know the general information on WAN.	
5) Click “Route” to display the window shown in the right figure, displaying the default information.	

5.2 Advanced Settings

5.2.1 WAN

Click “WAN”. If the WAN information has been set, you can edit or modify it in this window.

Caution: After modifying/ adding new information, you need to reboot the device to activate the setting.

1) VPI (Virtual Path Identifier): Virtual path between two points in the ATM network. Its value ranges 0 ~ 255.
2) VCI (Virtual Channel Identifier): Virtual channel between two points in the ATM network. Its value ranges 32 ~ 65535 (1 ~ 31 are reserved for the well-known protocols).

ATM PVC Configuration
This screen allows you to configure an ATM PVC identifier (VPI and VCI) and select a service category. Otherwise choose an existing interface by selecting the checkbox to enable it.
Please select your region, automatically fill VPI and VCI.
Country:
China
Area:
Shenzhen
VPI: [0-255]
8
VCI: [32-65535]
35
VLAN Mux - Enable Multiple Protocols Over a Single PVC
Service Category:
UBR Without PCR
Enable Quality Of Service
Enabling packet level QoS for a PVC improves performance for selected classes of applications. QoS cannot be set for CBR and Realtime VBR. QoS consumes system resources; therefore the number of PVCs will be reduced. Use Advanced Setup/Quality of Service to assign priorities for the applications.
Enable Quality Of Service
Back
Next

3) Service category: Selecting one from five available service categories. 4) Enable Quality of Service (QoS): check to enable it.	

PPPoA mode

1) Select “PPP over ATM (PPPoA)”. Encapsulation Mode: VC/MUX LLC/ENCAPSULATION Once you select one mode, the system automatically changes the encapsulation mode into the one matching your setting. Therefore, it is recommended to keep the default setting unchanged.	

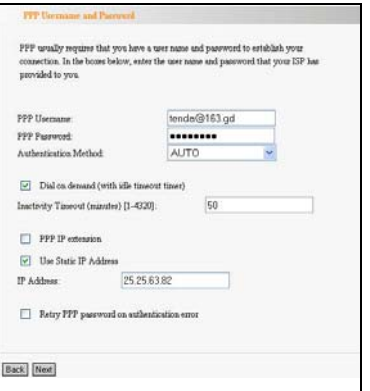
2) Click “Next” to display the window shown in the right figure.

a. Authentication Method: AUTO/PAP/CHAP/MSCHAP. Usually, “AUTO” is selected.

b. Dial on demand:

If you check this option, you need to manually enter the timeout time. If no flow is detected when the timeout time is up, the device will disconnect the network connection automatically. And when a flow is detected, the device automatically makes dial-up connection again.

If you disable this option, the device is always in online status until device power-off, connection failure or other failures occur.


PPP Username and Password
PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.
PPP Username:
tenda@163.gd
PPP Password:
Authentication Method:
AUTO
Dial on demand (with idle timeout timer)
Inactivity Timeout (minutes) [1-4320]:
60
PPP IP extension
Use Static IP Address
IP Address:
25.25.63.82
Retry PPP password on authentication error
Back
Next

C. PPP IP extension: When the integrated gateway is connected with a computer, the IP address obtained through the upstream link is directly allocated to this computer connecting with the device. After the PPP IP extension is enabled, you can enable the advanced DMZ. At this time, you need to enter your DMZ host and subnet mask. d. Use Static IP Address: After this option is checked, the device uses this IP address as the WAN IP address and does not need to obtain it through the upstream link. e. Retry PPP password on authentication error f. Enable PPP debugging mode.	

3) Click “Next” to display the window shown in the right figure. a. Enable IGMP Multicast: IGMP agent. For example, to enable the IPTV in the PPPoE mode, you need to check this option. b. Enabled WAN Service: Checked by default. It is recommended to keep this default setting, unless you do not need to activate your WAN.	

4) Click “Next” to display the window shown in the right figure. This window shows the general information set.	
5) Click “Save/Reboot” to activate your settings.	

PPPoE mode

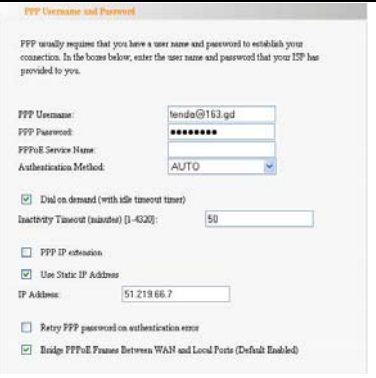
1) Select “PPP over Ethernet (PPPoE)”. Encapsulation Mode: VC/MUX LLC/SNAP-BRIDGING Once you select one mode, the system automatically changes the encapsulation mode into the one matching your setting. Therefore, it is recommended to keep the default setting unchanged.	

2) Click “Next” to display the window shown in the right figure.

a. Authentication Method: AUTO/PAP/CHAP/MSCHAP. Usually, “AUTO” is selected.

b. Dial on demand: If you check this option, you need to manually enter the timeout time. If no flow is detected when the timeout time is up, the device will disconnect the network connection automatically. And when a flow is detected, the device automatically makes dial-up connection again.

If you disable this


PPP Username and Password
PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.
PPP Username:
tenda@163.gd
PPP Password:
PPPoE Service Name:
Authentication Method:
AUTO
Dial on demand (with idle timeout timer)
Inactivity Timeout (minutes) [1-4320]:
50
PPP IP extension
Use Static IP Address
IP Address:
51.219.66.7
Retry PPP password on authentication error
Bridge PPPoE Frames Between WAN and Local Ports (Default Enabled)

option, the device is always in online status until device power-off, connection failure or other failures occur. c. PPP IP extension: When the device is connected with a computer, the IP address obtained through the upstream link is directly allocated to this computer connecting with the device. After the PPP IP extension is enabled, you can enable the advanced DMZ. At this time, you need to enter your DMZ host and subnet mask. d. Use Static IP Address: After this option is checked, the device	

uses this IP address as the WAB IP address and does not need to obtain it through the upstream link. e. Retry PPP password on authentication error f. Enable PPP debugging mode.	

8) Click “Next” to display the window shown in the right figure. a. Enable IGMP Multicast: IGMP agent. For example, to enable the IPTV in the PPPoE mode, you need to check this option. b. Enabled WAN Service: Checked by default. It is recommended to keep this default setting, unless you do not need to activate your WAN.	

8) Click“Next” to display the window shown in the right figure. This window lists your settings.	
8) Click “Save/Reboot” to activate your settings.	

MER mode

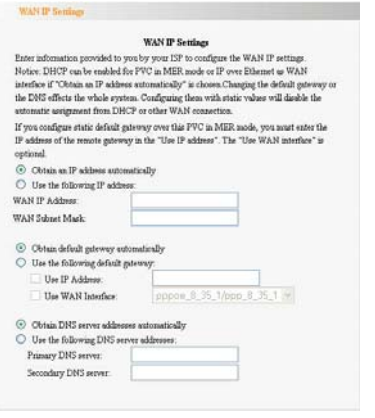
1) Select “MAC Encapsulation Routing(MER)”. Encapsulation Mode: VC/MUX LLC/SNAP-BRIDGING Once you select one mode, the system automatically changes the encapsulation mode into the one matching your setting. Therefore, it is recommended to keep the default setting unchanged.	

2) Click “Next” to display the window shown in the right figure.

a. Obtain an IP address automatically:
If your device automatically obtains the IP address, the IP address and other parameters will be from your ISP automatically.

b. Use the following IP address:
To manually specify an address, you need to check this option and enter your static IP address and subnet mask.

c. Obtain default gateway automatically:
If this option is checked, the device automatically obtains


WAN IP Settings
WAN IP Settings
Enter information provided to you by your ISP to configure the WAN IP settings.
Notice: DHCP can be enabled for PVC in MER mode or IP over Ethernet as WAN interface if "Obtain an IP address automatically" is chosen.Changing the default gateway or the DNS effects the whole system. Configuring them with static values will disable the automatic assignment from DHCP or other WAN connection.
If you configure static default gateway over this PVC in MER mode, you must enter the IP address of the remote gateway in the "Use IP address". The "Use WAN interface" is optional.
Obtain an IP address automatically
Use the following IP address:
WAN IP Address:
WAN Subnet Mask:
Obtain default gateway automatically
Use the following default gateway:
Use IP Address:
Use WAN Interface:
pppoe_8_35_1/ppp_8_35_1
Obtain DNS server addresses automatically
Use the following DNS server addresses:
Primary DNS server:
Secondary DNS server:

the default gateway address from the upstream device. 3) Use the following default gateway: To manually enter a gateway, check this option. a. Use IP Address: After checking "Use the following default gateway", you can enter a value here. b. Use WAN Interface: For the broadband access device, you need to enter the IP address of the downstream link interface. 4) Obtain DNS server address automatically: If this option is checked, the device	

automatically obtains the DNS address. 5) Use the following DNS server address: To manually enter a DNS address, check this option. a. Primary DNS server b. Secondary DNS server	
6) Click “Next”. a. Enable IGMP Multicast: IGMP agent. For example, to enable the IPTV in the PPPoE mode, you need to check this option. b. Enable WAN Service: Checked by default. It is recommended to keep this default setting, unless you do not need to	

activate your WAN.	
7) Click “Next” to display the window shown in the right figure. This window lists your settings.	
8) Click “Save/Reboot” to activate your settings.	

IPoA mode

1) Select “IP over ATM (IPoA)”. Encapsulation Mode: VC/MUX LLC/SNAP-ROUTING Once you select a mode, the system automatically changes the encapsulation mode into the one matching your setting. Therefore, it is recommended to keep the default setting unchanged.	

2) Click “Next” to display the window shown in the right figure.

a. WAN IP Address: Enter the IP address provided by your ISP.

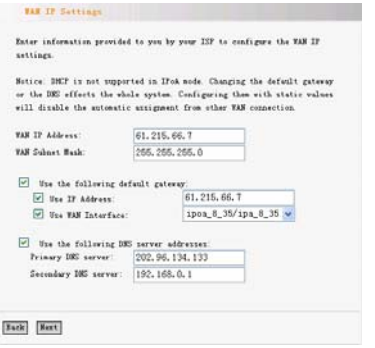
b. WAN Subnet Mask: Enter the subnet mask provided by your ISP.

c. Use the following default gateway: You can check this option.

d. Use IP Address: Enter the IP address provided by your ISP.

e. Use WAN Interface: For the broadband access device, you need to enter the IP address of the downstream link interface.

3) Use the following DNS server address:


WAN IP Settings
Enter information provided to you by your ISP to configure the WAN IP settings.
Notice: DHCP is not supported in IPoA mode. Changing the default gateway or the DNS effects the whole system. Configuring them with static values will disable the automatic assignment from other WAN connection.
WAN IP Address:
61.215.66.7
WAN Subnet Mask:
255.255.255.0
Use the following default gateway:
Use IP Address:
61.215.66.7
Use WAN Interface:
ipoa_8_35/ipa_8_35
Use the following DNS server addresses:
Primary DNS server:
202.96.134.133
Secondary DNS server:
192.168.0.1
Back
Next

You can check this option. a. Primary DNS server b. Secondary DNS server **Caution**: In the IPoA mode, DHCP is not supported, so you need to manually enter the WAN IP address, subnet mask, default gateway, DNS server and other settings.	

4) Click “Next”.

a. Enable NAT:
NAT enables multiple computers in your LAN to use the same WAN IP address for Internet access. It is recommended to check this option.

b. Enable Firewall
It is recommended to check this option to avoid some attacks.

c. Enable IGMP Multicast:
IGMP agent. For example, to enable the IPTV in the PPPoE mode, you need to check this option.

d. Enable WAN Service:
Checked by default. It is recommended to keep this default setting,unless you do not need to activate your

Settings - Backup
Network Address Translation Settings
Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).
Enable NAT
Enable Firewall
Enable IGMP Multicast, and WAN Service
Enable IGMP Multicast
Enable WAN Service
Service Name:
ipoa_8_35
Back
Next

WAN.	

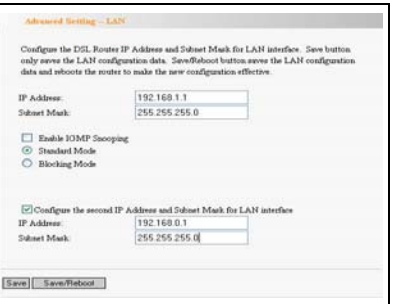
e. Click “Next” to display the window shown in the right figure. This window lists your settings.	
g. Click “Save/Reboot” to activate your settings.	

Bridging mode

1) Select “Bridging”. Encapsulation Mode: VC/MUX LLC/SNAP-BRIDGING Once you select a mode, the system automatically changes the encapsulation mode into the one matching your setting. Therefore, it is recommended to keep the default setting unchanged.	
2) Enable Bridge Service: To select the bridge mode, you need to check this option. By default, this option is checked.	

3) Click “Next” to display the window shown in the right figure. This window lists your settings.	
4) Click “Save/Reboot” to activate your settings.	

5.2.2 LAN

1). IP Address: IP address used by the router to connect to the LAN. This option is set to 192.168.1.1 upon device delivery. You can change it as required. **Caution:** After changing this IP address, you need to use the new IP address to access the Web management window upon next login to the router. In addition, you must set the default gateway in each computer in your LAN to this IP address, to ensure normal Internet access. 2). Subnet Mask: Setting	

your subnet mask. 3). Enable IGMP Snooping: Used in the bridge mode. 4). Standard Mode 5). Blocking Mode 6). Configure the second IP Address and Subnet Mask for LAN interface.	
Click “Save/Reboot”.	

5.2.3 NAT

5.2.3.1. Virtual Server

1) Click “NAT” → “Virtual Server” to display the window shown in the right figure. Here, you can add or delete your virtual server settings. By default, the external networks cannot access the IP address of your internal network. However, if you need such access by the external networks (for example, you need to set up the server or support some special applications), you should enable this function to allow the access by external networks.	

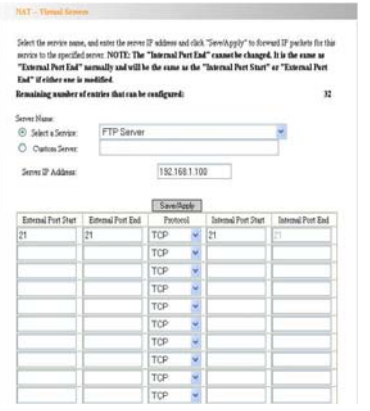
2) Click “Add” to display the window shown in the right figure.

a. Select a Service: Selecting the service to be enabled.

b. Custom Server: Manually entering the server name.

c. Server IP Address: LAN IP address for the server.

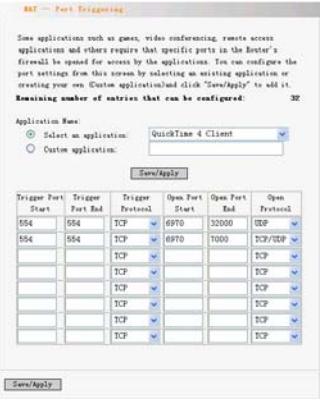
Caution: After a service is selected, the system automatically opens the corresponding port. After you manually enter a customized service, you need to manually enter the port to be opened.


NAT -- Virtual Servers
Select the service name, and enter the server IP address and click "Save/Apply" to forward IP packets for this service to the specified server. NOTE: The "Internal Port End" cannot be changed. It is the same as "External Port End" normally and will be the same as the "Internal Port Start" or "External Port End" if either one is modified.
Remaining number of entries that can be configured: 32
Server Name:
Select a Service: FTP Server
Custom Server:
Server IP Address: 192.168.1.100
Save/Apply
External Port Start
External Port End
Protocol
Internal Port Start
Internal Port End
21
21
TCP
21
21

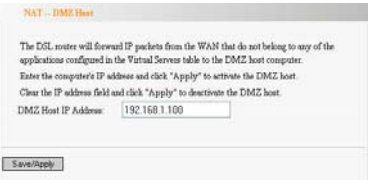
d. Click “Save/Apply” to display the service added, as shown in the right figure.	

5.2.3.2 Port Triggering

1) Click “Port Triggering” to display the window shown in the right figure. Here, you can add or delete your port triggering service settings. For some special applications, you need to enable some application ports. Through the port triggering, you can enable the automatic opening of the ports required by applications.	

2) Click “Add” to display the window shown in the right figure. a. Select an application: Selecting the name of the service to be enabled. b. Custom application: Manually entering the service name. **Caution**: After a service is selected, the system automatically sets the corresponding port. After you manually enter a customized service, you need to manually enter the port to be triggered.	
3) Click “Save/Apply” to display the service added, as shown in the right figure.	

5.2.3.3 DMZ Host

1. Click “DMZ Host” to display the window shown in the right figure.	
2. DMZ Host IP Address: Entering the LAN IP address for the DMZ host. **Caution**: Opening DMZ means to open all ports. In this case, your computer is totally exposed to the public network. Be cautions to use this function. Click “Save/Apply” to activate the settings.	

5.2.3.4 UPNP

1) Click “UPNP” to display the window shown in the right figure. Enable UPnP: Check to Enable the UPnP (Universal Plug and Play) function. UPnP is a kind of architecture of common network connection between the computer and intelligent devices/instruments. It is especially common in the family application. Based on the Internet standards and technologies (such as TCP/IP, HTTP and XML), UPnP enables automatic connection and cooperation between such devices, thus to make more people can	

access the network (especially the family network). Click “Save/Apply” to activate the settings.	

5.2.4 Security

5.2.4.1 IP Filtering

1) Click “Security” → “IP Filtering” to display the window shown in the right figure. By default, all outgoing traffic is allowed. However, you can set IP filtering to restrict external network access by some computers in the internal network.	

2) Click “Add” to display the window shown in the right figure.

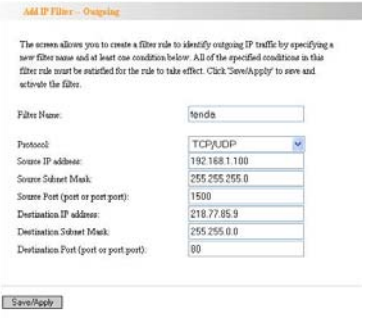
a. Filter Name: Setting the filtering name to facilitate identification.

b. Protocol: Selecting one from four available protocols: TCP/UDP; TCP; UDP; ICMP.

c. Source IP address: Entering the internal network IP address to be filtered.

d. Source Subnet Mask: Entering the subnet mask corresponding to the internal network IP address to be filtered.

e. Source Port: Entering the port number of the internal network IP address to be filtered.


Add IP Filter -- Outgoing
The screen allows you to create a filter rule to identify outgoing IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click 'Save/Apply' to save and activate the filter.
Filter Name:
tenda
Protocol:
TCP/UDP
Source IP address:
192.168.1.100
Source Subnet Mask:
255.255.255.0
Source Port (port or port:port):
1500
Destination IP address:
218.77.85.9
Destination Subnet Mask:
255.255.0.0
Destination Port (port or port:port):
80
Save/Apply

f. Destination IP address: Entering the external network IP address to be filtered. g. Destination Subnet Mask: Entering the subnet mask corresponding to the external network IP address to be filtered. h. Destination Port: Entering the port number of the external network IP address to be filtered. Based on the above settings, you can add your filtering rules. You can select your WAN interface. However, it is recommended to keep the default setting unchanged.	

3) Click “Save/Apply”.	
4) Click “Incoming” to display the window shown in the right figure. By default, all incoming traffic is restricted. However, you can set IP filtering to allow internal network access by some external computers.	

5) Click “Add” to display the window shown in the right figure.

a. Filter Name: Setting the filtering name to facilitate identification.

b. Protocol: Selecting one from four available protocols: TCP/UDP; TCP; UDP; ICMP.

c. Source IP address: Entering the external network IP address to be filtered.

d. Source Subnet Mask: Entering the subnet mask corresponding to the external network IP address to be filtered.

e. Source Port: Entering the port number of the external network IP address to be filtered.

Add IP Filter -- Incoming
The screen allows you to create a filter rule to identify incoming IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click 'Save/Apply' to save and activate the filter.
Filter Name:
tenda
Protocol:
TCP/UDP
Source IP address:
218.77.87.8
Source Subnet Mask:
255.255.0.0
Source Port (port or port:port):
80
Destination IP address:
192.168.0.100
Destination Subnet Mask:
255.255.255.0
Destination Port (port or port:port):
1500
WAN Interfaces (Configured in Routing mode and with firewall enabled only)
Select at least one or multiple WAN interfaces displayed below to apply this rule.
Select All
pppoe_8_35_1/ppp_8_35_1
Save/Apply

f. Destination IP address: Entering the internal network IP address to be filtered. h. Destination Subnet Mask: Entering the subnet mask corresponding to the internal network IP address to be filtered. i. Destination Port: Entering the port number of the internal network IP address to be filtered. Based on the above settings, you can add your filtering rules. You can select your WAN interface. However, it is recommended to keep the default setting unchanged.	

5) Click “Save/Apply”.	

5.2.4.2. Parent Control

1) Click “Time of Day Restriction” to display the window shown in the right figure.	
2) Click “Add” to display the window shown in the right figure. Here, you can set a specific period to restrict Internet access of a MAC address.	

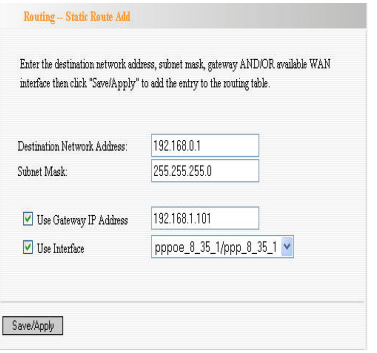
3) Click “Save/Apply”.	

5.2.5 Routing

5.2.5.1 Default Gateway

1) Click “Routing” → “Default Gateway” to display the window shown in the right figure. Enable Automatic Assigned Default Gateway: You can check/uncheck this option. If you uncheck this option, you need to manually enter the default gateway address and WAN service. It is recommended to keep the default setting unchanged. 2) Click “Save/Apply”.	

5.2.5.2 Static Routing

1) Click “Static Route” to display the window shown in the right figure. Here, you can add/ delete the items of the static route.	
1) Click “Add” to display the window shown in the right figure. Destination Network Address: Entering the network or host for static route. Subnet Mask: Entering the subnet mask correspond- ing to the network or host for static route. Use Gateway IP Address: Entering the	

gateway address to be passed by the static route. Use Interface: Selecting the interface correspond- ing to your connection mode. Click “Save/Apply”.	

5.2.6. DNS

5.2.6.1 DNS Server

1) Click “DNS Server” to display the window shown in the right figure. 2) Enable Automatic Assigned DNS: After checking it, the DNS settings are activated. And the DHCP server of the router allocates the added DNS address to the client	

submitting the request. 3) Primary DNS server: Entering the DNS address provided by the ISP. 4) Secondary DNS server: If your ISP provides two DNS addresses, you can enter the other address here.	

5.2.6.2 Dynamic DNS

1) Click “Dynamic DNS” to display the window shown in the right figure. Here, you can add/ delete the dynamic DNS settings. Dynamic DNS can make your applied domain name correspond to your IP address, so that the other users only need to remember your domain name for accessing your server.	

2) Click “Add” to display the window shown in the right figure. D-DNS provider: Selecting a specific provider of dynamic DNS. Hostname: Domain name applied by you. Interface: Selecting one from two available interface modes. Username: Your user name registered on the website of the dynamic DNS provider. Password: Password corresponding to your user name registered on the website of the dynamic DNS provider.	

3) Click “Save/Apply”.	

Advanced Setting — Dynamic DNS
The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the many domains, allowing your DSL router to be more easily accessed from various locations on the Internet.
Choose Add or Remove to configure Dynamic DNS.
Hostname
Username
Service
Interface
Remove
tenda
lyd
dyndns
ppp_8_35_1
Add
Remove

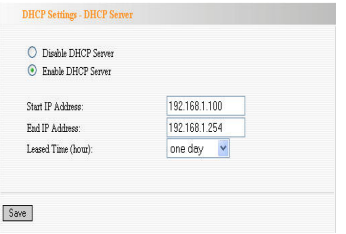
5.2.7 DSL

Click “DSL” to display the window shown in the right figure. Here, you can enable a service as required. By default, the system checks the status of G.dmt, G.lite, T1.413, ADSL2, ADSL2+, AnnexL, Inner pair and Bitswap. The device can automa- tically negotiate with the upstream device.	

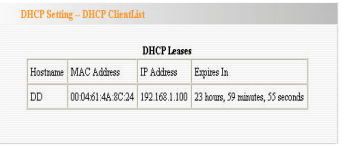
5.3 DHCP

i. Click “DHCP Server” to display the window shown in the right figure.

1. You can click “Disable DHCP Server” or “Enable DHCP Server”.
2. Start IP Address: Start address of the DHCP server IP pool
3. End IP Address: End address of the DHCP server IP pool
4. Leased Time: Validity period of the IP address obtained. Click “Save”.



Click “DHCP Client List” to view the list of the clients with allocated DHCP service.



5.4 System Tool

5.4.1 Settings

1. Click “Backup” to display the window shown in the right figure. Here, you can back up the current settings of the router.	
2. Click “Update” to display the window shown in the right figure. Here, you can restore the router settings from the backup file.	

3. Click “Restore Default” to display the window shown in the right figure. Click “Restore Default Settings” to restore the default settings before device delivery. **Caution**: After restoring the default settings, you need to reboot the router to activate this modification.	

5.4.2 System Log

1. Click “System Log” to display the window shown in the right figure.	
2. Click “View System Log” to display the window shown in the right figure.	

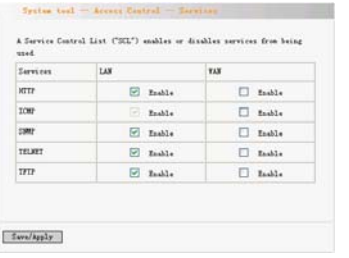
3. Click “Configure System Log” to display the window shown in the right figure. (1) Log: Enable; Disable (2) Log Level: Selecting the required level, Debugging by default. (3) Display Level: Error by default. (4) Mode: Local by default. If you select “Remote” or “Local/Remote”, the system transmits the log UDP packets to your log server. Click “Save/Apply”.	

5.4.3 Internet Time

1. Click “Internet Time” to display the window shown in the right figure. If you enable this function, the system can automatically obtain the time when accessing the Internet.	

5.4.4 Access Control

5.4.4.1 Service

(1) Click “Access Control” to display the window shown in the right figure. You can enable or disable FTP/HTTP/ICMP/SNMP /SSH/TELNET/TFTP. (2) Click “Save/Apply” to activate the settings	

5.4.4.2 IP address

(1) Click “IP Address” to display the window shown in the right figure. Here, you can add/delete items. Access Control Mode: Enable; Disable. When you enable it, the IP address allowed can access the management page.	
(2) Click “Add” to display the window shown in the right figure. You can enter an IP address, which is allowed by the system for access- ing the management page. Click “Save/Apply” to activate the settings.	

5.4.4.3 Password

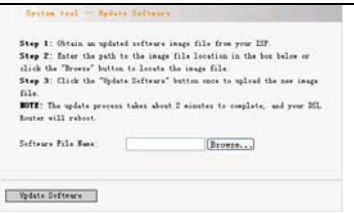
(1) Click “Password” to display the window shown in the right figure. Here, you can modify the password for logging in to the Management page. Enter the former login password, and then the new login password. If the former login password is correctly entered, you can click “Save/Apply” to successfully modify the login password.

Caution: For the sake of security, we highly recommend you to change the initial user name and password.

(2) Click “Save/Apply” to activate the modification.

The user name "admin" has unrestricted access to change and view configuration of your DSL Router.
The user name "support" is used to allow an ISP technician to access your DSL Router for maintenance and to run diagnostics.
The user name "user" can access the DSL Router, view configuration settings and statistics, as well as, update the router's software.
Use the fields below to enter up to 16 characters and click "Apply" to change or create passwords. Note: Password cannot contain a space.
Access to your DSL router is controlled through three user accounts: admin, support, and user.
Username:
admin
Old Password:
New Password:
Confirm Password:
Save/Apply

5.4.5 Software Update

1. Click “Update Software” to display the window shown in the right figure. Click “Browse” to select your update file, and then click “Update Software”.	

5.4.6 Save/Reboot

1. Click “Save/Reboot” to display the window shown in the right figure. Rebooting device can activate the changed settings. However, the ADSL connection is automatically interrupted before the reboot.	

Chapter 6 Appendix

Appendix 1: Troubleshooting

Trouble Case	Troubleshooting
Power Indicator Off	● Check if the power adapter is ● Connected properly. ● Check if the power adapter is matched.
ADSL Off	● Check if the ADSL cable connection is OK. ● Make sure the telephone line is OK you're your phone. ● Check the phone line cabling is right.
LAN Off	● Check the Ethernet cable is OK. ● Make sure the PC's NIC indicator is ON. ● Make sure the NIC works normally.

Can't access the Internet	• Make sure the above troubles are clear. • Make sure the dial-up connection is established and set up. • Make sure the user name and password are right. • If the dial-up is OK, please make sure the IE proxy server is configured properly. • Please try opening multiple web pages

Appendix 2: FAQ

Q: What are VPI, VCI?

A: VPI (Virtual Path Identifier) and VCI (Virtual Channel Identifier) are to identify ATM terminal (ADSL) for DSLAM, usually provided the local ISP.

Q: What related parameters are required from your ISP?

A: For dial user, Connection protocol, User name, Password, Value of VPI/VCI, Encapsulation mode and so on.

Q: The firmware upgrade fails and I can't enter the Web-based management interface?

A: Contact the technical engineer for support or after-sales service engineer.

Note: please download the upgrade packets from the Tenda website.

Q: Have completed all configurations, but can't dial through computer?

A: 1) Check the indicator of ADSL, it should be working in normally.

2) Check the accuracy of parameter of value of

VPI/VCI, Encapsulation mode and so on.

3) Make sure the dial-up connection is established.

4) You can check whether your ADSL Modem succeeds in connection through PING command.